

# EMILIE SIMPSON

SETI Institute

## EXPERIENCE

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### Research Associate — Ring Moon Systems Node

*July 2022 - Present*

Multipurpose programmer for miscellaneous Python projects.  
SETI Institute — Mountain View, CA

## EDUCATION

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### University of California, Riverside — Riverside, CA

*September 2020 - June 2022*

MS in Earth and Planetary Sciences  
Department of Earth and Planetary Science

### University of California, Riverside — Riverside, CA

*September 2016 - June 2020*

Bachelor of Science in Physics  
Physics and Astronomy Department

## RESEARCH POSITIONS

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### Graduate Researcher

Analyzing photometry of known hosts from the TESS mission, focusing on stellar variability and its effects on identifying and characterizing an exoplanet's atmosphere.

### Undergraduate Researcher

Conducted follow-up analysis of TESS lightcurves using Python in search of anomalies

## FELLOWSHIPS & COMPETITIVE AWARDS

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Dean's Distinguished Fellowship Award, UC Riverside (2020-2022)

Honorable Mention: "Stellar Variability of Known Exoplanet Hosts Observed by TESS", Poster Competition, TESS Science Conference II (August 2021)

## CONFERENCES AND WORKSHOPS

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### Talks

#### "False Positive Exoplanet Induced by Stellar Variability"

Simpson, Emilie ; Fetherolf, Tara ; Kane, Stephen ; Li, Zhexing ; Pepper, Joshua ; Mocnik, Teo  
AAS 240, Pasadena, CA May 2022

### Posters

#### "Stellar Variability of Known Exoplanet Hosts Observed by TESS"

E. Simpson, T. Fetherolf, S. Kane, J. Pepper, T. Močnik  
TESS Science Conference II, MIT/Virtual

### Workshops

### **NAIF SPICE Workshop**

Monrovia, CA (Oct. 25-27, 2022)

### **E. Margaret Burbidge Observational Astronomy Workshop**

UCO/Lick Observatory, Hamilton, CA (Oct. 9-11, 2020)

### **California State Summer School for Mathematics and Science (COSMOS)**

University of California, Irvine (Summer of 2015)

## **PUBLICATIONS**

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### **“Science Extraction from TESS Observations of Known Exoplanet Hosts“**

Stephen R. Kane, Jacob L. Bean, Tiago L. Campante, Paul A. Dalba, Tara Fetherolf, Teo Močnik, Colby Ostberg, Joshua Pepper, Emilie R. Simpson, Margaret C. Turnbull, George R. Ricker, Roland Vanderspek, David W. Latham, Sara Seager, Joshua N. Winn, Jon M. Jenkins, Daniel Huber, William J. Chaplin; 2020, Publications of the Astronomical Society of the Pacific, Volume 133, Issue 1019, id.014402, 10 pp.

### **“Revisiting BD-06 1339b: A Likely False Positive Caused by Stellar Activity“**

Emilie R. Simpson, Tara Fetherolf, Stephen R. Kane, Zhexing Li, Joshua Pepper, Teo Močnik; 2022, The Astronomical Journal, Volume 163, Issue 5, id.215, 6 pp.

### **“Stellar Variability of Known Exoplanet Hosts Observed By TESS“**

E. Simpson et al in prep

## **TEACHING EXPERIENCE**

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### **Graduate Teaching Assistant**

PHYS2LB *Fall 2021*

Led two sections of general physics laboratory courses. Subjects include: Ideal Gas Law, specific heat of solids, buoyancy, and basic concepts of electromagnetism (charge, electric fields, equipotential lines, DC and RC circuits).

### **Introduction to Astronomy Research Course**

*Summer 2021*

Led discussions on astronomy-related topics on a webinar-style virtual platform

### **Graduate Teaching Assistant**

PHYS2LA *Spring 2021*

Led two sections of general physics laboratory courses. Subjects include: Newton’s three laws, friction coefficients, application of forces, and rotational mechanics.